INTERNATIONAL TRADE ADMINISTRATION

2015 Top Markets Report
Education

A Market Assessment Tool for U.S. Exporters

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U.S. Department of Commerce | International Trade Administration | **Industry & Analysis (I&A)**

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John Siegmund and **Barb Rawdon** served as lead authors of this report. A note of thanks goes to **David Long** for his thoughtful review of early drafts.

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Executive Summary and Key Findings

Global competition for international students is rising quickly, especially among English-speaking countries and countries increasing their English-language course offerings. Although U.S. institutions still host the largest percentage of internationally mobile students, this share is eroding as competition increases. This report assesses global market opportunities for U.S. colleges and universities, providing guidance for U.S. institutions interested in the recruitment of international students.

For the purpose of this *Top Markets Report*, we have chosen to focus on the largest markets with the most potential for growth. Forty markets were considered. Eight markets were chosen for Case Studies as these markets were large, exhibited significant past growth, and/or had had economic and demographic indicators of future growth.

From a global perspective, the number of internationally mobile students is projected to reach 1,070,000 in 2017/18 [See Figure 2]. These students will come largely from a concentrated number of countries, with roughly 40 percent coming from China, but will study at many locations throughout the United States.

Within the United States, no school dominates the market for international students. Even the school that hosts the largest number of international students is home to only 1.2 percent of the total number of international students studying in the United States. On the other hand, almost 60 percent of students studying in the United States originate in the top five "sending" countries. China alone currently accounts for 31 percent of international students in the United States. After the top five countries (China, India, South Korea, Saudi Arabia, and Canada), no country accounts for more than 2.4 percent of international students in the United States.[1]

U.S. colleges and universities enjoy a strong competitive advantage over similar institutions in many other countries, presenting a unique opportunity to support export growth while also providing talented students to the country's many outstanding colleges and universities. U.S. schools benefit from a reputation for high-quality education, English-language instruction, strong curricula in attractive areas (science, technology, engineering and mathematics, or STEM, and business), and research facilities. These advantages are somewhat offset by perceived visa challenges and concerns about high tuition.

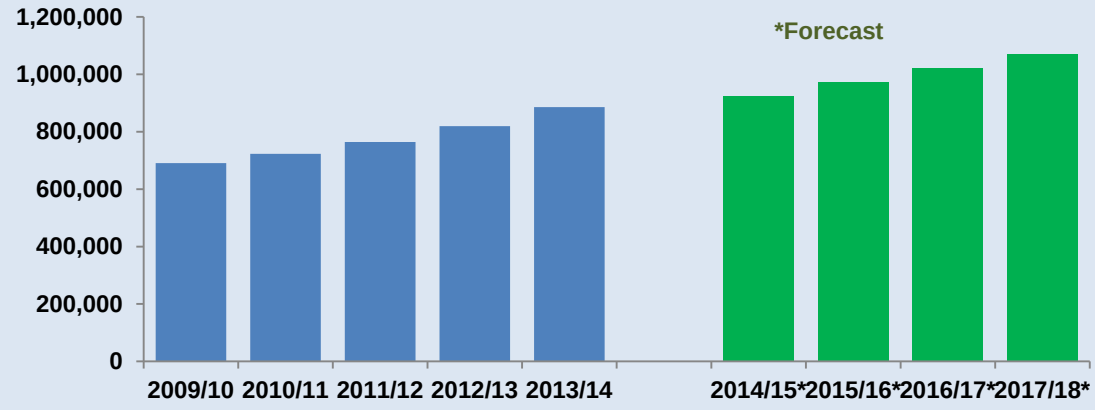
The relationship between college recruiters and U.S. Government agencies involved in international recruitment has been a close collaborative partnership for many years. The U.S. Government has facilitated the recruitment of international students by organizing live student fairs, virtual student fairs, and trade missions for education professionals, as well as providing online and in-person market research and counseling to students and recruiters.

U.S. Government support for scholarship programs, including the Fulbright Program, has increased the visibility of top U.S. programs. Continuing efforts to improve the student visa process and to partner with the private sector – a result of this collaboration – will also enhance the United States as a destination for international study. There is an opportunity to focus these resources and programs further to assist schools in entering the competition for international students and to direct resources and recruitment programs toward promising areas that have not received as much attention.

Figure 1: Projected Top Markets for Education Exports (2015-2016)

1. China
2. India
3. Saudi Arabia
4. South Korea
5. Germany
6. France
7. Luxembourg
8. Russia
9. Norway
10. Spain
11. Brazil
12. Italy
13. Turkey
14. Sweden
15. Indonesia
16. Greece
17. Canada
18. Denmark
19. United Kingdom
20. Slovenia
21. Netherlands

Figure 2: Total International Students in the United States



Source: IIE Open Doors for historic data and ITA for forecast data

The Nature of Education Exports

Attracting the best students from around the world has become a large and growing global export opportunity and source of competition. Policy-makers around the world increasingly recognize the benefit of facilitating a globally-minded society, and of empowering their populations with the best ideas and skills that are provided by leading universities. In 2014, roughly 4.5 million students were expected to study outside their home country.[2] This figure is up from just 2.1 million students in 2001.

The benefits of foreign students coming to the United States for their higher education, however, go far beyond the cultural diffusion of new ideas and new ways of thinking. This brings in capital from foreign markets, resulting in the export of an education service. Tuition, fees, and living expenses all benefit the local communities in which foreign students live, often over a period of several years of study.

Last year, the total number of students coming to the United States exceeded 886,000,[3] an eight percent increase from the previous year and a 72 percent increase over the past 14 years. These students contributed $27 billion to the U.S. economy[4] – a number that ITA expects to increase going forward as tuition costs increase and more students come to the United States. As colleges and universities seek to diversify their student bodies and increase the international nature of their programs, recruit the best minds, and increase their revenues, many are actively recruiting foreign students, which will continue to expand this market in the years ahead.

Structure of the global education market - Universities

Roughly 70 percent of U.S. degree-granting colleges and universities are public entities or non-profit organizations.[5] This rate is higher in other countries.

There is virtually no concentration of market power across the global market. In the United States, for example, more than 4,000 degree-granting post-secondary schools provide university-level education, and the four schools with the largest international enrollments together represent about five percent of total foreign enrollments in the United States (see Export Profile of the U.S. Education Industry section below).

More than 30 percent of university revenues in the United States today derive from student tuition (the remainder comes from other sources such as state, federal, and local funding or contracts; sales and services of hospitals or other enterprises; private gifts or returns from university endowments), a sharp contrast to university programs offered at low or no cost by governments in many other countries.

Host country	No. of schools	No. of int'l students	Int'l students as percent of total enrollments	Global share of int'l students
United States	4,726	886,000	4.0 %	20 percent
United Kingdom	860	435,500	18 %	11 percent
Australia	130	249,990	18.8 %	6 percent
Canada	128 (2011/12)	293,505^	20.9 %	
France	330	295,092	12 %	7 percent
Germany	428	300,900*	11.3 %	6 percent
China	2,788	356,499^	1 %	8 percent

UK, France: 2013-14 school year
^ = 2013 data , ^^2011/12 academic year, *2014 projection, from July 2014 = 300,909; 2013 actual: 282,201

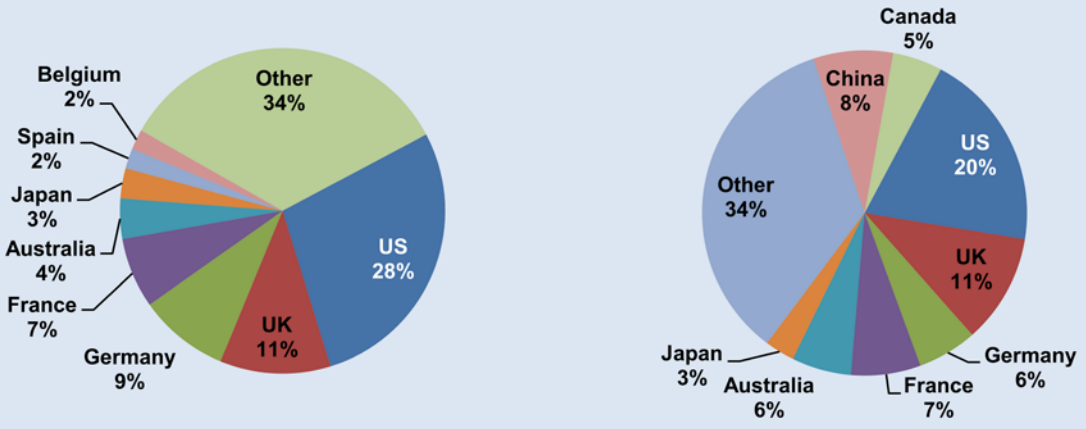
The great difference in scale between the United States and its leading competitors for international students stands out as a central feature of the global market. The United States has a large number of schools that can compete for university-level students, but the number of students coming here, however large, is still a small share of total college enrollments.

The leading competitors – primarily English-speaking countries such as the United Kingdom, Australia, and Canada, but including a growing number of others – have far fewer universities seeking to recruit students, but international students represent a much larger share of their total enrollments.

Against this structural backdrop, the U.S. share of a growing market for international students has declined. In 2002, the United States hosted roughly 585,000 students, accounting for 28 percent of all internationally mobile students. By 2014, the United States hosted only 20 percent[6] of the total. The decline is due to multiple factors such as the increase in recruiting by schools from English-speaking countries abroad, the growth of English-language instruction offered in non-English-speaking countries, improved quality at colleges and universities abroad, increased investments in non-U.S. universities, increased information available through the internet about other destinations and colleges, and rising tuition costs in the United States [see Figure 3].

Key competitors for international students include the United Kingdom (11 percent of all international students), China (8 percent), France (7 percent), Germany (6 percent), and Australia (6 percent).[7] Although these countries have a fairly robust percentage of internationally mobile students, each country is home to fewer than 500 colleges and universities, concentrating foreign students far more than in the United States.

Figure 3: U.S. Share of Internationally Mobile Studies (2001 vs 2014)



Source: Atlas of Student Mobility, IIE.org

Figure 4: Types of Education Export Markets

China: Biggest market, high growth	Germany: Medium-sized market, stable
India: Second largest market, stable	France: Medium-sized market, stable
Saudi Arabia: Rapidly growing market	Brazil: Medium-sized market, rapid recent growth
South Korea: Large stable market	Vietnam: Medium-sized market, good growth

The number of foreign students studying at higher education institutions in each country (as a percentage of total students enrolled) is also significantly higher than the 4.0 percent posted by the United States. In Australia and the United Kingdom, for example, foreign students comprise 20 percent of the overall student population in colleges and universities.[8] Canada, France, and Germany all report that their foreign student population exceeds 10 percent of total university-level enrollments.

According to the report "International Student Recruitment: Policies and Developments in Selected Countries" by the Netherlands Organization for International Cooperation in Higher Education (2012), the number of countries that actively recruit international students has grown considerably. In addition, countries that once only sent students abroad have started to improve the quality of their own education systems and developed strategies and policies to attract students themselves. These countries include China, South Korea, Mexico, and to a lesser extent, Russia, Taiwan, Thailand, Brazil, Argentina, and Chile.

More countries are competing for students from the same group of countries. Target countries for schools and countries new to recruiting tend to be from their own region (Asia, Latin America, or North Africa). The Dutch report goes on to say that several countries are attempting to become top destinations for higher education and research in their respective regions (e.g., Switzerland, China, Singapore, and others).

The reasons for countries to undertake international student recruitment are varied. Two prominent reasons are (1) the belief that the presence of international students improves the quality of education, and (2) the belief that international students contribute to a knowledge society and economy. For some countries, a low birth rate encourages recruiting international students. For the United States, the contribution of international students to the U.S. economy is crucial, and there is an expectation that international students will contribute to U.S. public diplomacy interests.

Although China has a very large domestic market for higher education, it hosts only eight percent of internationally mobile students.[9] This is likely to increase substantially as more Chinese universities offer courses in English and more foreign universities establish branch campuses or specialized programs in China. The long-term effect of this growth within China on U.S. export performance is uncertain.

It is still too early to tell whether the U.S. universities will be competing against other Asian, Canadian, or European universities for the same Chinese students. The total number of students now coming to the United States from the broader Asian region (apart from China and a few other top markets such as Taiwan or South Korea) is relatively low as a share of the total and may have little effect on U.S. export performance. The success of Indian technical universities in attracting foreign and local students to

Figure 5: How to Identify Potential Education Export Markets

Two actions that indicate a country's growing interest in international recruitment are the establishment of a government or quasi-government agency to promote higher education to international students, and attendance at annual conferences hosted by organizations such as NAFSA: Association of International Educators, the European Association of International Education (EAIE), the Asia-Pacific Association for International Education Conference and Exhibition, and the Australian International Education Conference. Typical agencies are the German DAAD (The German Academic Exchange Service), Campus France, and The British Council. Conferences such as the ones listed above provide an important opportunity for representatives of countries attending to discuss international education with other countries and negotiate agreements relating to international education.

top programs might provide some useful data on the significance of this trend.

The larger competitive risk is that Chinese universities might divert a larger share of U.S.-bound Chinese students – on the basis of cost, convenience, or even government policy and incentives – but this will likely be offset to some extent by the advantages U.S. schools enjoy in terms of language, the cultural immersion experience, and the different types of schools and programs available in the United States. The competition may well be limited at first to specific technical or management areas.

This suggests that recruiting efforts in China and the surrounding countries may benefit from a clear focus on differentiating the U.S. experience from that in host countries that are building out new universities and programs. The new universities, even those with top technical programs, will have a long way to go to build entire university systems capable of competing with the leading U.S. schools across broad ranges of disciplines.

Structure of the global education market – Students and courses of study

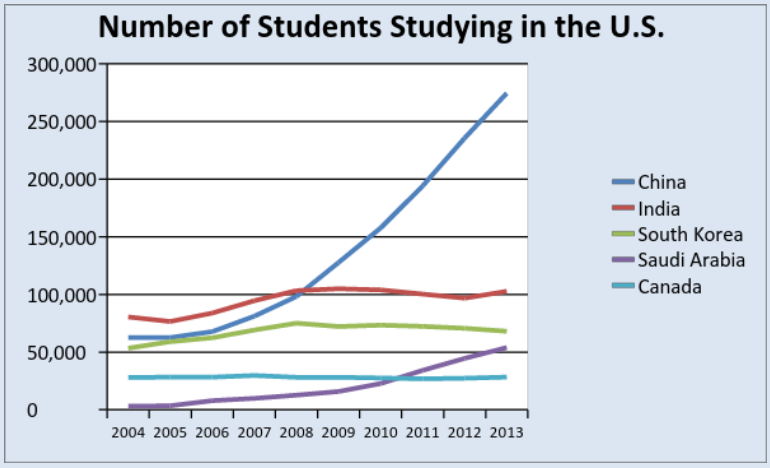
In contrast to the competition among universities here and abroad for international students (the supply side), the sources of the students themselves for particular destination countries (demand) tend to be somewhat more concentrated among a small group of leading source countries. This group is led by China and India, followed by a larger group of countries contributing smaller but mostly stable numbers of students each year. Last year, 60 percent of foreign students studying in the United States came from just five countries: China, India, South Korea, Saudi Arabia, and Canada. The top three countries alone account for 50 percent of foreign students in the United States. After the top 10-15 "sending" countries, enrollments per country fall below 1 percent of the total -- below 9,000 students per year.

Countries with notable increases in the number of students studying in the United States compared to last year include Kuwait (43 percent growth), Brazil (22 percent growth) and Saudi Arabia (21 percent growth). Students from each of these countries benefitted from government programs to promote study abroad.[10]

In the global competition for students, the STEM fields (science, technology, engineering, and mathematics) and business dominate. In fact, 21 percent of international students study Business and Management in the United States, while engineering comes in slightly behind at 19 percent. Other top fields include math and computer science, physical and life sciences, and social science. Interestingly, although 79 percent of students from India studying in the United

Figure 6: Number of Students Studying in the United States (by country of origin)

	2003/04	2013/14	% Change	% of Total, 2013/2014
Total Foreign Students in U.S.	572,509	886,052	55 %	NA
Chinese Students in U.S.	61,765	274,439	344 %	31 %



States pursue STEM subjects, only 42 percent of Chinese students in the U.S. study STEM subjects (28 percent of Chinese study business/management).[11] U.S. colleges and universities attempting to recruit prospective Indian students might want to highlight their STEM curricula and faculty, while schools meeting with prospective students from China may find it beneficial to emphasize their business and management programs in addition to their STEM curricula.

Export profile of the U.S. education industry

Success in attracting international students has created an education trade surplus for the United States. In 2013, the United States exported $27.2 billion in education services (revenue from foreign students coming to the United States) and imported $6.5 billion (U.S. students studying abroad). Thus the United States enjoyed a trade surplus in education of $20.7 billion.[12] This trade surplus is due largely to the fact that: (1) fewer than 300,000 U.S. students studied abroad in 2013 (the latest available data); (2) 60 percent of those students attended programs that were short-term (summer or eight weeks or less); and (3) tuition at most foreign universities is far less than tuition in the United States – although some study abroad exchange programs requires students to pay regular tuition rates to their home institution rather than paying tuition to their host institution.[13]

No Single School Dominates the Market for Students

No single U.S. school or group of schools dominates the market for international students. New York University, the top destination for foreign students in the United States, hosted only slightly more than 11,000 of the 886,000 students studying in the United States last year – or just over 1 percent.[14] The top 20 schools taken together only account for 18 percent of total international students studying in the United States. Thus the benefits of international education flow broadly across the country to a wide variety of institutions, large and small.

As demonstrated in the chart below, China and India have been the top countries sending students to the United States for the past 10 years, with China growing much more quickly than the other top "sending" countries. In fact, 68 percent of the increase in the number of foreign students studying in the United States is due to the increase in the number of Chinese students.

Although China is building a number of new colleges and universities, several factors combine to make further increases in Chinese students studying in the United States very likely. Among these are population growth, a growing Chinese middle class, strong recruitment activities in China from U.S. institutions, and a strong focus on education. More detail regarding the potential and risks of recruitment efforts in China

Figure 7: TOP 20 INSTITUTIONS HOSTING INTERNATIONAL STUDENTS, 2013/14

Institution	City	State	2012/13	2013/14	% Growth
New York University	New York	NY	9,362	11,164	19.2
University of Southern California	Los Angeles	CA	9,840	10,932	11.1
University of Illinois - Urbana-Champaign	Champaign	IL	9,804	10,843	10.6
Columbia University	New York	NY	8,797	10,486	19.2
Purdue University - Main Campus	West Lafayette	IN	9,509	9,988	5
University of California - Los Angeles	Los Angeles	CA	8,424	9,579	13.7
Northeastern University	Boston	MA	7,705	9,078	17.8
Arizona State University	Tempe	AZ	6,645	8,683	30.7
Michigan State University	East Lansing	MI	6,759	7,704	14
University of Washington	Seattle	WA	6,491	7,469	15.1
University of Michigan - Ann Arbor	Ann Arbor	MI	6,827	7,273	6.5
Boston University	Boston	MA	6,615	7,143	8
Penn State University - University Park	University Park	PA	6,693	7,024	4.9
Ohio State University - Main Campus	Columbus	OH	6,478	6,800	5
Indiana University - Bloomington	Bloomington	IN	6,547	6,661	1.7
University of Minnesota - Twin Cities	Minneapolis	MN	6,178	6,621	7.2
SUNY University at Buffalo	Buffalo	NY	5,804	6,594	13.6
University of California - Berkeley	Berkeley	CA	5,632	6,372	13.1
University of Texas - Dallas	Richardson	TX	5,193	6,296	21.2
University of Florida	Gainesville	FL	5,961	6,135	2.9

Figure 8: Visa Issues

U.S. immigration policy on student admissions must reconcile the need to protect U.S. security interests with the need to facilitate the entry of international students into the United States. Considerable progress has been made to streamline the process for obtaining an F-1 (student) visas in the decade since the 9/11 attacks. However, students in F-1 status are only allowed to work on the university campus, not off campus, except under exceptional circumstances. Our leading competitors -- Canada, Australia and the United Kingdom -- all have more liberal policies allowing for gainful employment during and after completion of study. In all of those cases, immigration policy supports the recruiting efforts to attract the best students and encourage them to remain and contribute to the nations' respective economies, increasing the attractiveness of studying in those countries.

and other countries appears in the Case Studies section of this report.

Challenges and Barriers to U.S. Exports

While the United States enjoys a strong competitive position within the international education market, challenges limit the potential for further exports in the near-term. These include the fact that other countries have much more liberal immigration policies than the United States; U.S. tuition costs, which are among highest in the world; and a perception that U.S. student visas are difficult to obtain. In addition, ITA expects that U.S. colleges and universities will suffer reduced demand from a significant increase in the number of European and Asian universities teaching courses in English.

Tuition Considerations

U.S. tuition costs are higher than those almost anywhere else (Australia, where annual tuition rates for a bachelor's degree run $12,000-$25,000, is an exception[15]). Yet the effect of the higher U.S. tuition is unclear. A sign of the contradictory trends is that the number of international students coming to the United States continues to increase year after year, even though the cost of university education in the United States continues to rise. In any case, European students, who have access to publicly funded universities, have the strongest financial incentive to study in Europe, rather than in the United States.

The average costs for tuition, fees, room, and board in the United States rose from $9,980 per year in 1985-86 to $20,234 in 2012-2013, or 102.7 percent. That compares with many European universities that typically charge less than $1,000 per year in tuition and fees.

Student Motivation and Demand for Higher Education

The demand for higher education is influenced by several factors such as: demographics, economics, secondary school completion rates, tuition costs, household income, and employer needs. The OECD Education at a Glance 2014 survey reported that, "In Chile, Brazil and Hungary, tertiary-educated people earn more than double the income of a person without upper secondary education." This perceived value of

Figure 9: Competition from Massive Open Online Courses (MOOCs)

Although the United States has led the industry in the development of MOOCs (edX and Coursera are the current leaders in the United States), competition is building from Europe and is aided by the development of the European Credit Transfer System (ECTS), a system to provide academic credit transfers for MOOC providers in Europe. New MOOC providers include Future Learn (United Kingdom), Iversity (EU), Schoo (Japan), Korea Open Courseware (South Korea); Xuetangzaixian (China), and others.

At present, MOOC courses are free, but MOOC creators are exploring ways to earn revenue from the courses. For example, Coursera recently introduced its "Signature Track," which provides a verified certificate for $49. The certification of the learner's identity relies on webcam confirmation. The edX program offers similar certification tracks and packages of courses presented as a series.

The effect on the U.S. balance of payments once MOOCs become profitable is uncertain. Coursera, the largest supplier of MOOCs, is an American company. Thus foreign students paying the fee for Coursera's "Signature Track" certificate would produce a U.S. export.

If a MOOC had 50,000 enrolled in a class, half of whom were foreign, and 10 percent chose Signature Track, then the revenue would be 2,500 X $49 = $122,500. If similar numbers applied to 100 MOOCs, then revenue would be $12,250,000. Thus, it seems unlikely that MOOCs will soon be able to affect the U.S. balance of payments.
The larger potential change is to the nature of college-level teaching models and the role of technology in education.

Table 10: FIELDS OF STUDY FOR STUDENTS FROM SELECTED PLACES OF ORIGIN, 2013/14														
		Science, Technology, Engineering, & Math (%)				All Other Fields (%)								
Place of Origin	TOTAL STUDENTS	STEM*	Engineering	Health Prof.	Math/ Comp. Sci.**	Physical/ Life Sci.	Business/ Mgmt.	Education	Fine/ Applied Arts	Humanities	Intensive English	Social Sci.	Other	Undeclared
Brazil	13,286	22	10.5	2.4	2.9	6.2	21.1	1.6	7.3	3.1	14.4	7.7	16.9	5.8
Canada	28,304	35.6	8.2	15	3.2	9.2	14.7	6.5	8.5	3.9	0.1	12.4	14.8	3.6
China	274,439	41.6	19.8	1.4	11.5	8.9	28	1.7	5.3	0.9	2.8	8.1	8.6	3
Germany	10,160	20.4	7.8	1.7	3.3	7.5	29.4	1.8	4.1	6.6	0.6	12.2	16.3	8.5
India	102,673	78.6	38	4.7	26	10	11.7	0.5	1.4	0.5	0.2	2.7	3.4	1.1
Iran	10,194	79.6	56	2.3	10.3	11.1	4.6	0.9	5.2	0.9	0.8	3.7	3.7	0.5
Japan	19,334	14.4	4.3	2.9	2.4	4.8	18.8	2.8	7.7	4.5	15.2	10.3	20.9	5.4
Mexico	14,779	31.5	17.3	3	3.9	7.4	21.3	2.8	8.4	3.7	2.8	9.5	14.7	5.4
Saudi Arabia	53,919	41.2	23.3	5.8	8.1	4.2	16.7	3.2	1.9	1.1	24	2.4	6.7	2.9
South Korea	68,047	29.7	12.7	4.3	5.3	7.4	17	3.1	12.8	4.5	3.7	11.9	13.4	3.9
Taiwan	21,266	39.3	17.1	4.4	6.8	10.9	21	3.3	12.5	2.2	4.2	6.4	9.2	2.1
Turkey	10,821	46.1	26.5	0.8	9.9	8.9	15.3	4.2	5.8	2.4	3.1	12.2	9	1.8
UK	10,191	19.5	5.3	3.5	3.3	7.4	17.3	4	7	7.1	0.1	15.6	21.8	7.6
Vietnam	16,579	30.2	10.2	4.3	8.1	7.6	37.5	0.9	3	1.2	4.1	5.1	9.2	8.8

Source: Institute of International Education. (2014). "Fields of Study of Students from Selected Places of Origin, 2013/14." Open Doors Report on International Educational Exchange. Retrieved from http://www.iie.org/opendoors

future earnings potential is a clear motivating factor. When foreign students were asked what motivated them to study abroad, most students cited a lack of university slots available in their home-country's highly prestigious colleges and universities. Other leading factors are listed below but include the desire to specialize in a specific area that was not offered in the home country and the ability to have access to specific research tools.

A full listing of the fields of study by selected countries of origin is available from the Institute of International Education. Countries which have 50 percent or more of their students studying in STEM fields include India, Iran, Malaysia, Nepal, and Nigeria, all developing countries whose governments support foreign studies as a means of promoting development goals. Countries that have 25 percent or more of their students studying Business/Management include China, France, Germany, Hong Kong, Indonesia, Venezuela, and Vietnam.

The data below show the fields of study in the United States sorted by students from different countries and could assist U.S. schools that specialize in a narrower set of program offerings. For example, over 50,000 foreign students studying in the United States last year studied Fine Arts, but very few of them came from

Table 11: International Students By Primary Source Of Funding			
Primary Source of Funding	2012/13 # Students	% of Total	% Change From Prior Year
Personal and Family	520,920	63.6	7.1
U.S. College or University	169,566	20.7	3.1
Foreign Government or University	57,898	7.1	30.6
Current Employment	43,800	5.3	8.2
Foreign Private Sponsor	9,229	1.1	-4.6
U.S. Private Sponsor	5,218	0.6	-11.1
U.S. Government	6,399	0.8	34.8
International Organization	1,412	0.2	-24.5
Other Sources	5,202	0.6	-21
Total	819,644	100.0	7.2

Source: Institute of International Education. (2013). "International Students by Primary Source of Funding, 2011/12 - 2012/13." Open Doors Report on International Educational Exchange. Retrieved from http://www.iie.org/opendoors

China, India, Iran, Saudi Arabia, or Vietnam. In contrast, U.S. business/management programs are almost universally popular.

Demand for higher education is influenced by financial considerations, but according to the Institute for International Education (IIE), over 60 percent of students fund their education with personal and family resources. The second most important source of financing is the U.S. college or university the student is attending. To assist both domestic and foreign students, most U.S. colleges and universities are sometimes able to offer financial aid in the form of scholarships, low-cost loans, stipends, research grants, and on-campus employment (although most students cannot accept off-campus employment during the first year of their studies). Offering these types of aid can raise difficult policy questions, since such aid may diminish the availability of scholarships or loans for U.S. citizens.

Utilizing U.S. Government Resources

ITA expects – given the growing global population, increasing secondary school graduation rates, the rising middle class, and the increase in financial assistance available for students – that the demand for higher education is likely to increase. Rising penetration rates for the internet will also help fuel this trend as students are able to gather more information about colleges and apply to colleges more easily. The move to the "Common Application" among over 500 schools in the United States, France, Switzerland, Austria, Germany, Italy and the United Kingdom also provides a competitive advantage to these schools as it reduces the paperwork burden on students applying to multiple schools.

In terms of competing with other countries for international students, the United States and United Kingdom have a strong advantage due to their historically superior academic reputations. Many students believe that an education from the United States or United Kingdom will boost their job prospects at home. That advantage is tempered somewhat by the fact that students view study in Australia to yield a more enjoyable experience and think Australia has more relaxed visa and immigration laws.

Characteristics of the university-level education market in each country give insights into promising export strategies. Schools looking to immediately boost their foreign student enrollment might want to consider focusing on China, India, Saudi Arabia, and South Korea -- countries sending the most students to the United States and which have fast-growing populations and middle classes (and in the case of Saudi Arabia, a strong government and private sector commitment to funding overseas education), and which highly prize U.S. higher education. The United States organizes many virtual education fairs and higher education tours visiting these countries.

Government-run education fairs are offered where private sector fairs are not available. Many of these government-run fairs do not target the biggest markets, as private sector organizers are already prevalent in those markets. Government education fairs often serve a market niche that is not covered by private industry – the need for campuses to diversify their student populations. In these cases, the government identifies promising target countries, recruits schools that might be interested in expanding their international enrollments, and publicizes the event to local students, faculty and education

Table 12: International Student Motivations

Reasons	World Aggregate Ranking
Limited places available to study at (highly prestigious) universities in the home country	3.5
Specialize in an area which is not offered in the home country	3
Have access to specific laboratories/libraries not available/accessible in the home country	3
Learn or improve knowledge of a foreign language	2.7
Interest in foreign culture, history and landscape	2.6
Get more practice-oriented education than offered in home country	2.6
Possibility to build up networks/friendships in an intercultural context	2.3
Improve career prospects/chances of getting a job in the home country	2.2
Opportunity to develop the personality/become more independent	2.1
Get a broader/more flexible education than offered in home country	2.1
Experience new ways of thinking and acting in the field of study	1.8
Improve chances for an international career	1.8

Source: IIE International Students in United States Report
Survey of International Students in the United States Question 13: *How important were the following reasons for your decision to study abroad?*
Scale from 1 = "very important" to 5 = not important at all"

government officials in the target market. The government also provides assistance with certain types of scholarship programs.

Schools which are looking to diversify their student bodies might want to focus on students from countries such as Brazil, Central America, and the less heavily recruited parts of Asia. A challenge arises when attempting to recruit students from European countries, as most European universities charge tuition and fees less than $1,000 per year, and students within the European Union are able to study in other EU countries at the same low price they would pay if they were natives of that country.

In fact, the main reason France, Germany, and Luxembourg scored highly in our efforts to determine *Top Markets* for U.S. education exports is because the "gap" between the number of students studying abroad and those studying in the United States is relatively high. The numbers of students from these countries is not particularly large (Germany sent slightly over 10,000 students to the U.S. last year while France sent 8,300), and the number of students from each country has not experienced the type of growth that other countries have experienced in the past 15 years. France grew only 33 percent over the past 15 years while Germany grew only 6 percent.

Current Government Actions Supporting U.S. Exports of Education

The U.S. Government should support exports of higher education as these contributed $27 billion to the U.S. economy in 2013 and are a substantial economic driver for many college and university towns and metropolitan areas. These programs should coordinate closely with private sector efforts to ensure efforts are not duplicated.

In addition to the 2015 Education and Training Services Resource Guide mentioned above, the U.S. Department of Commerce Education Team (http://export.gov/industry/education/index.asp) is planning virtual education trade fairs, education trade missions, webinars, and other events to promote educational exports.

In addition to these resources, the U.S. Department of State supports EducationUSA, a network of hundreds of advising centers in 170 countries that work with U.S. higher education professionals to promote international student enrollment in the United States. In addition to providing print and online materials at EducationUSA Advising Centers, advisers reach prospective student audiences through fairs and outreach events at local schools, universities, and other public venues. The State Department also funds the annual Institute for International Education Open Doors report which provides statistics about rates of college- and university-level international student mobility to and from the United States. More information about this program can be found on www.EducationUSA.info.

The International Affairs Office at the U.S. Department of Education seeks to simultaneously advance two strategic goals: strengthening U.S. education and advancing our nation's international priorities. Through these efforts, they help promote education exports and host the annual International Education Week. More information on their efforts is available on http://www.ed.gov/edblogs/international/.

Potential Future Government Actions Promoting Education Exports

The U.S. Department of Commerce and the State Department's EducationUSA program have been working closely to offer events and activities to promote U.S. colleges and universities around the globe. A recent example was the highly successful Central American Education Mission in March 2015. These groups will continue to organize events and analyze trends in student mobility and to treat each market according to the interests of U.S. colleges and universities and the special circumstances of the market. They will also make efforts to avoid duplicating private sector efforts by groups organizing education trade missions such as the Institute for International Education, Linden Tours, ELS Educational Services, Study State consortium, etc.

These activities will be guided by the fact that some schools recruiting international students are focused on increasing the number of international students on campus in the near-term (although it may take up to three visits in a market to begin seeing student applications unless the school contracts with an effective partner). Other institutions which are more focused on diversification are likely to want to focus on markets beyond these top markets.

Country Case Studies

The following pages include country case studies that summarize export opportunities in selected markets. The markets represent a range of countries to illustrate a variety of points – and not just the top few markets overall.

These case studies are meant to provide suggestions for export promotion specific to these markets. Some activities, which are not mentioned, are effective in all markets. Webinars, market assessment reports, the International Buyers Program, and other trade events reach a wide cross-section of exporters and provide important information to U.S. institutions about opportunities to recruit foreign students and should continue as such.

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Brazil

Over the past 15 years, Brazil has sent between 7,009 and 13,286 students annually to the United States. It is the steady increase in the number of Brazilian students studying in the United States over the last three years, primarily due to the Scientific Mobility Program, that helps make Brazil an attractive market for student recruitment.

Overall Rank

11

Substantial increases in the number of Brazilians studying in the United States in each of the last three years are largely due to Brazil's Scientific Mobility Program. During the 2013/14 academic year, Brazil was the 10th leading source of students studying in the United States.

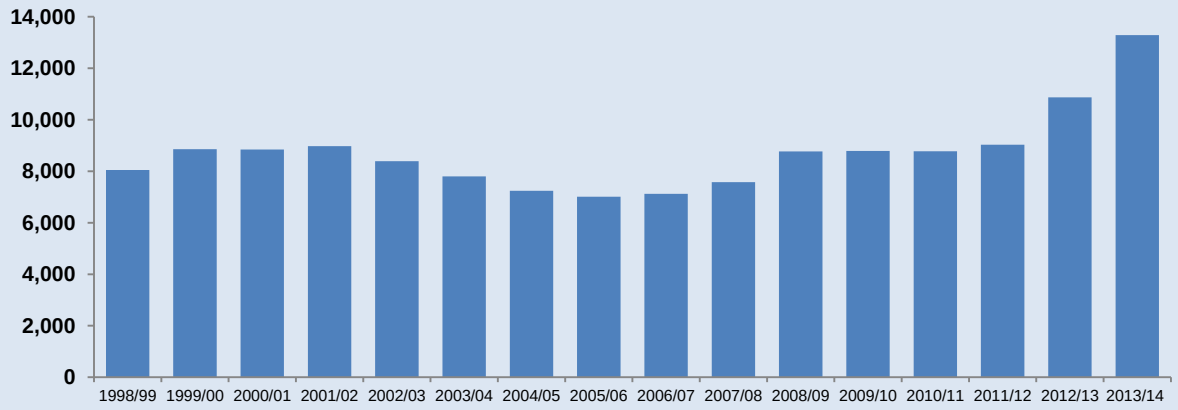
In 2011, the Brazilian government launched the Scientific Mobility Program (originally the Science without Borders Program). It was launched in an effort to support one-year, non-degree programs for Brazilian students to study abroad. President Dilma Rousseff recently extended the program. The program focuses on the STEM fields (science, technology, engineering, and mathematics). The Scientific Mobility Program is part of a larger initiative to offer 101,000 Brazilian university students the opportunity to study abroad at the world's best colleges and universities. The first cohort of Brazilian students arrived in the United States in January 2012 for the spring 2012 semester.[16]

Since the program's inception, the United States has been the single largest destination for participants. Approximately 36,000 Brazilian students from the program have studied to date in the United States at more than 300 institutions in 49 states.

Before her reelection, President Rousseff announced a second phase of the Scientific Mobility Program, which will contribute to the growth in the number of Brazilian students coming to the United States. U.S. institutions interested in hosting Brazilian students under the program may apply with the Institute of International Education, Scientific Mobility Program, at http://www.iie.org/Programs/Brazil-Scientific-Mobility.[17]

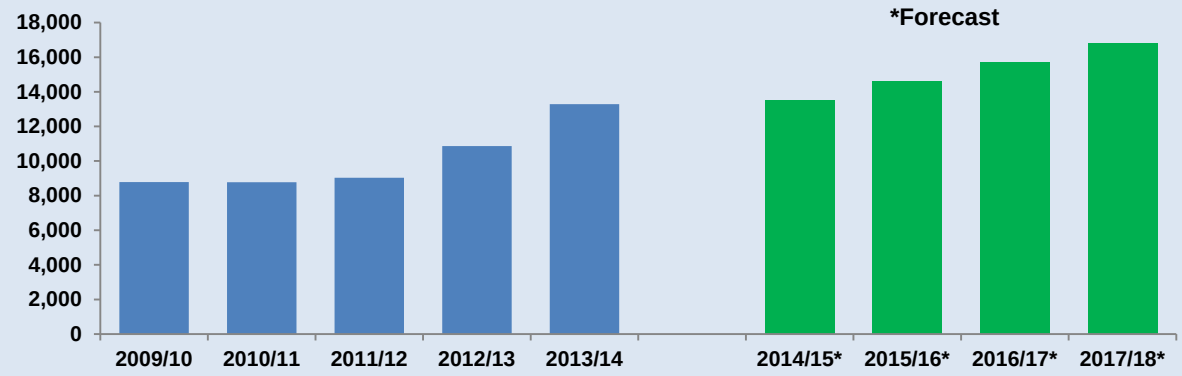
This program has been factored into our forecast of 6.1 percent growth in the number of Brazilian students studying in the United States over the next four years. Specifically, we believe Brazilian students will increase from almost 13,286 in 2013/14 to 16,800 students by 2017/18.

Figure 1: Brazilian Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: Brazilian Students in the United States (2009-2018)



Source: IIE/Open Doors

United States is the Destination of Choice for Brazilian Students

The Brazilian market scores well against the criteria presented in the ITA methodology, primarily for recent growth trends and the opportunity to expand U.S. participation in this market. First, the number of Brazilian students studying in the United States has continued to increase, reaching 13,286 in 2013/14, and a historic high. Second, the OECD reports that in 2011, only 35,000 Brazilian students studied abroad. Third, the recent growth rate in numbers of Brazilian students is sharply up, a crucial trend. Finally, in 2010/11, before the Scientific Mobility Program got fully underway, 8,777 Brazilian students studied in the United States, or only about 25 percent of the total Brazilian students studying abroad. This suggests that there is room to increase the U.S. share of this market.

In contrast to the OECD finding that about 25 percent of all Brazilian students studying abroad studied in the United States, the United States has attracted about 30 percent of all Brazilian students enrolled in the Scientific Mobility Program, again suggesting the possibility of growing U.S. performance in this market. The economic impact of all Brazilian students on the U.S. economy is significant, estimated by the U.S. Bureau of Economic Analysis to be $333 million in 2013 (tuition, fees, and living expenses).[18]

Overview of Global Export Market Opportunities in Education for Brazil

In 2013/14, just 38 percent of Brazilian students in the United States were undergraduates. Graduate students numbered just over 23 percent of Brazilian students in the United States. Students in Optional Practical Training, high schools, and "Non-degree Programs" made up the remainder.

Of all Brazilian students, 22 percent study STEM subjects and 21 percent study Business/Management. Intensive English is also popular, garnering 14 percent of Brazilian students. States hosting the largest number of STEM students are New York, California and Illinois. Finally, a significant number of Brazilian students need intensive English training before entering their one-year academic program, funded by the Scientific Mobility Program, which offers opportunities for providers of intensive English training.[19]

Future Growth/Opportunities

In the near term, the number of Brazilian students is likely to increase, as a result of the extension of the Scientific Mobility Program. In the recent past, the percentages of Brazilian students studying in the United States have been on the decline (e.g., 53 percent of Brazilian students in 2001 but only 25 percent today). However this trend might be reversed as the United States is hosting roughly 30 percent of all Brazilian students studying in the Scientific Mobility Program, emphasizing the importance of funding in decisions where to study.

Factors potentially dampening the demand for U.S. education in Brazil include growing competition from other countries and the need for highly proficient English language capabilities for students studying in the United States. Brazilian students show strong interest in exchange programs, rather than going abroad for all undergraduate coursework, in large part

because equivalency is sometimes not granted by Brazilian Universities for coursework completed outside Brazil. The Scientific Mobility Program conforms exactly to this preference among Brazilian students.[20]

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China

China has become by far the largest single source of international students studying in the United States. In 2013-14, China sent 274,439 students to the United States, an increase of 17 percent over its total in 2012-2013. Chinese students make up a commanding 31 percent of all international students in the United States and have accounted for about two-thirds of the increase in total international student enrollments coming to the United States since 2003. This strong growth is likely to continue, presenting important export opportunities for U.S. colleges and universities.

Overall Rank

1

Based on 2011 data (the most recent available), China sent 339,700 students to study abroad. Of this group, 57 percent (over 194,000 students) chose to study in the United States. The economic impact of these students on the U.S. economy is significant, and the Bureau of Economic Analysis reports that in 2013 (the most recent data available) U.S. exports of education services (tuition, fees, and living expenses) to China reached $8.0 billion.[21]

Level and Fields of Study for Chinese Students

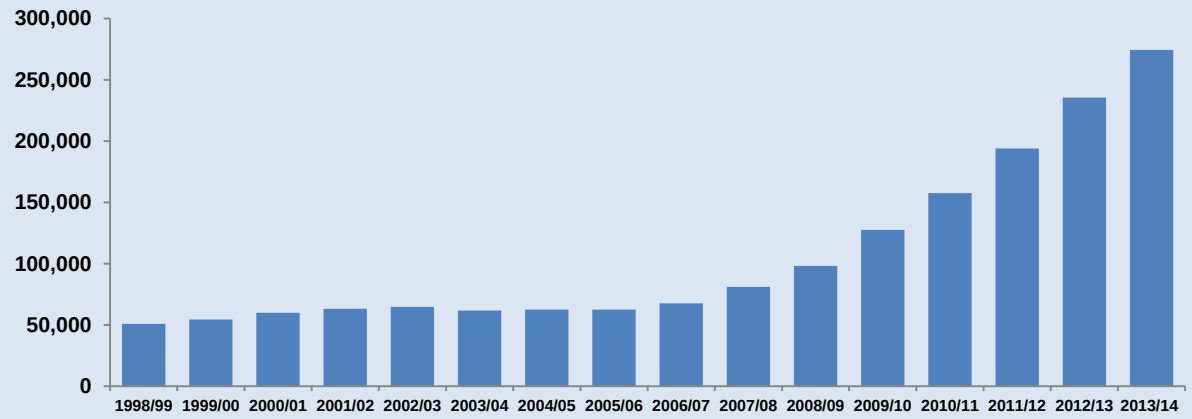
Chinese students are fairly evenly split with 42 percent of Chinese students in the United States studying at the graduate level while 40 percent are undergraduates. The remainder of Chinese students is enrolled either in "Optional Practical Training" or "Other."

As with many other countries, the STEM fields are the largest field of study for Chinese students. STEM fields attracted 42 percent of Chinese students. Business and management attract 28 percent, and the social sciences, eight percent.[22]

There does not seem to be a geographic concentration of Chinese students among the top 10 states hosting international students. While each of these top 10 states hosts in excess of 25,000 international students, Chinese students only comprised more than 40 percent of all international students in Ohio, where Chinese students comprise 42 percent of all international students, and in Indiana, where they represented 41 percent.[23]

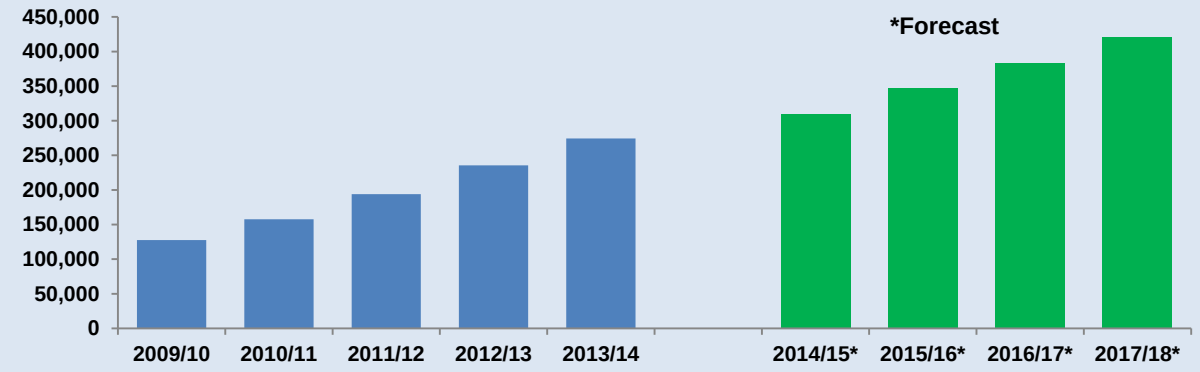
Chinese students are also increasingly attracted to U.S. boarding schools, in the belief that a year or two of study at a U.S. boarding school will facilitate acceptance at a U.S. college or university.

Figure 1: Chinese Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: Chinese Students in the United States (2009-2018)



Source: IIE/Open Doors

Future Growth/Opportunities

In the near term, the number of Chinese students is likely to show a substantial increase, estimated as at least 11 percent over the next four years. ITA estimates that sustained growth will result from: rising college-age population, growing middle-class, rising per capita GDP, continued growth in word-of-mouth referrals, and growing internet penetration rates which expose more potential students to overseas study opportunities.

Both the International Trade Administration's (ITA's) Commercial Service and the State Department's EducationUSA offer information and guidance on recruitment of Chinese students for U.S. institutions. The Internet and social media are significant parts of recruitment efforts, despite Chinese restrictions on some uses of the Internet in China. In China, and many other parts of Asia, it is important to supplement online recruitment efforts with face-to-face recruitment efforts such as student fairs because Chinese parents (many of whom do not possess strong English-language capability), play a large role in determining whether and where their son or daughter will attend university.

ITA has not organized a recent trade mission to China, as many U.S. institutions want to diversify their foreign student body and seek missions targeting other countries. Furthermore, several private sector organizations offer help in recruiting students in China.

Factors Which Might Dampen Future Growth

It is unlikely that the types of growth we have seen from China in recent years will continue indefinitely as U.S. institutions are increasingly focused on diversifying their campuses and are hesitant to depend on foreign students from any individual country. In addition, the Chinese government has significantly increased its efforts to build universities in China and third countries have universities that are growing in stature and will be a challenge to U.S. institutions. Finally, other English-speaking countries offer education in English and at a lower cost in tuition and fees than many U.S. institutions.

France and Germany

Germany and France rank among the top potential markets for educational services. Although the two markets at first glance are very different, their characteristics as sources of international students for the United States are strikingly similar and illustrate the challenges of increasing student enrollments from highly developed European economies. Unlike a number of the leading emerging markets, the decisive factors in attracting students from these markets are largely separate from straightforward considerations such as economic performance or interest in studying in the U.S. or other leading western economies.

France	Germany
6	5

The factors in our methodology characterize these markets and others with similar characteristics as attractive but limited in terms of opportunities for increasing student enrollments. There are already a large number of students from France and Germany at universities in the United States, and both countries have a tradition of sending students abroad in significant numbers.

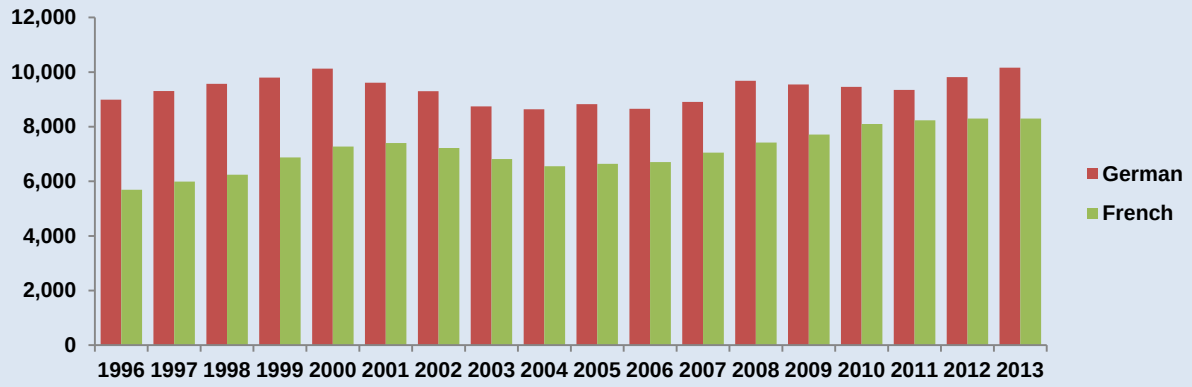
Against that record, however, the rate of increase in enrollments in the United States is substantially slower than in a number of key markets in, for example, Asia or the Middle East. Finally, in light of the many educational opportunities within Europe and the large number of students who go abroad under various programs in Europe as well as the United States, the gap in potential students in these markets is perhaps smaller than in other leading educational markets.

Germany, with over 10,000 students studying in the United States, and France, with over 8,000,[24] are both significant markets for U.S. colleges and universities looking to diversify their campuses or increase the number of foreign students studying at their institutions. They rank in the top 15, according to the Institute of International Education statistics. However, growth during the past 15 years (33 percent for France and 6 percent for Germany) continues to be less robust than growth from other markets. The U.S. Department of Commerce estimates the two markets combined added $623 million[25] to the U.S. economy in 2013 as a result of tuition, fees, and living expenses.

The majority of French students studying abroad study in Belgium (22 percent) followed by the United Kingdom (20 percent), Canada (12 percent), Switzerland and the United States (both 9 percent), and Germany (8 percent).

German students study primarily in Austria (22

Figure 1: French and German Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: Level of Study (French and German Students in the United States)

	France	Germany
Undergraduate	35 %	30 %
Graduate	28 %	28 %
Other	26 %	37 %
Optical Practical Training	11 %	6 %

percent), the Netherlands (18 percent), the United Kingdom (15 percent), Switzerland (11 percent) and the United States (6 percent).

A central challenge in recruiting from these two markets is that many students, when they go abroad seek schools where there are native language affiliations (for example, French speakers in Belgium or French-speaking Canada, German students in Switzerland or Austria). English-language instruction is attractive, but in these markets English is already well established in virtually all areas of international life, and opportunities abound within the EU to study in English. Perhaps even more important, tuition rates at even the top European universities, including those in the United Kingdom, are generally substantially lower than in the United States.

Level and Fields of Study for French and German Students

When looking at the level of French or German students studying in the United States, we see more similarities, with over 30 percent studying as undergraduates and slightly under 30 percent being graduate students.

Operators of intensive English Language programs should take note of the fact that in 2013, over 1,600 German students studying in the United States were studying English. During the same period, almost 1,000 French students were enrolled in Intensive English Language classes.

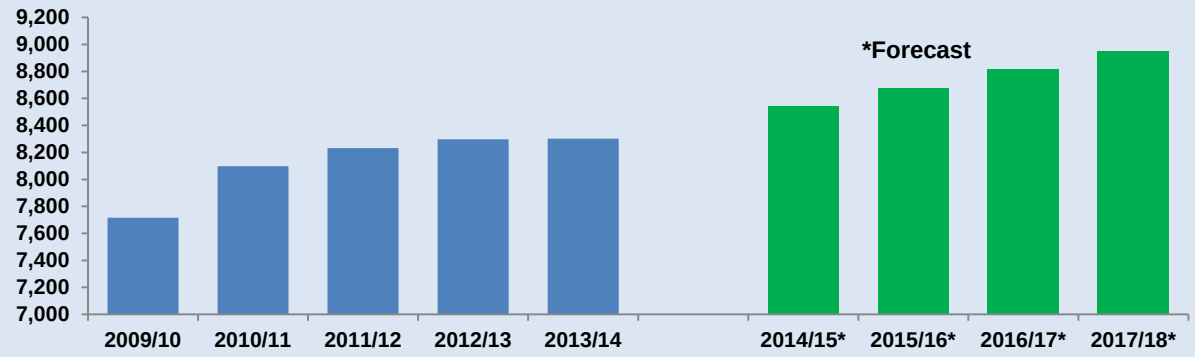
France and Germany also show many similarities with 26 percent and 20 percent of students in the United States studying STEM subjects, 26 percent and 29 percent studying Business/Management, and 20 percent and 16 percent studying "Other."

The best prospects for increasing enrollments by students from these two countries would appear to stem from focusing on recruiting for the STEM subjects and business management, in combination with the offer of the total immersion language environment and exposure, especially in graduate business schools, to entrepreneurial training and opportunities.

Future Growth/Opportunities

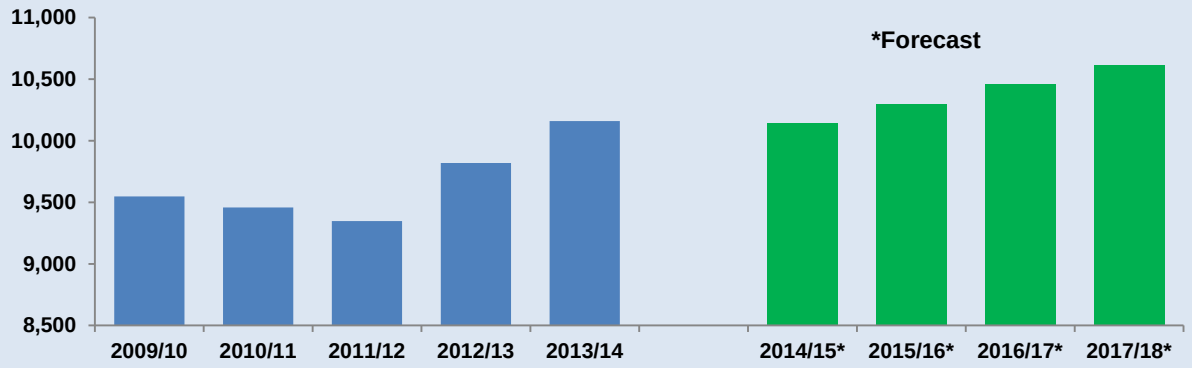
Both France and Germany are solid markets for schools interested in diversifying their international student body. Most universities in both countries have shifted to a three-tier bachelor/master/doctorate system of education – making the comparison of educational credentials easier. In addition, both countries benefit from high per-capita income, substantial business ties with the United States, and strong secondary school

Figure 3: French Students in the United States (2009-2018)



Source: IIE/Open Doors

Figure 4: German Students in the United States (2009-2018)



Source: IIE/Open Doors

education ties to the United States.

In France, the high unemployment rate has led some students to pursue the perceived employment advantage offered by a college degree. Although most universities in France offer free or nearly free tuition, these are often overcrowded, while top-tier French Grandes Ecoles confer great career advantages but are extremely competitive.

Germany boasts the largest economy in Europe, and roughly 90 percent of students study English during their schooling at some point.

It might be an attractive recruiting tool to focus on the high quality of U.S. university training and its advantages, especially in business and technology, over less-structured or, in some cases, limited European programs. The widespread use of English makes recruitment easier, but in the end the largest challenges in recruiting from Germany may be cost, the availability of alternatives in the United Kingdom or other English-speaking countries, and perhaps differences in how German society and American society approach the complex relationship between careers and university training. Another factor is the smaller numbers of German students who follow a pure university path.

Marketing U.S. Colleges and Universities to French and German Students

In addition to traditional student fairs, U.S. colleges and universities should consider reaching French and German students through on-line advertising, blogging, Facebook, and Twitter. Many schools are successful in Germany through partnership agreements with German schools which cover student exchange and the recognition of course credits between partner institutions. In France, most U.S. colleges and universities focus their recruitment efforts in Paris. Recruitment efforts that include other cities in France in addition to Paris, particularly those with strong universities or a sister city connection generally yield effective results.

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India

For the past decade, India has ranked first or second among "sending" countries, along with China. In 2013/2014, India sent 102,673 students to the United States. Over the last 15 years, the number of Indian students that have come to the United States has varied between 37,482 in 1998/99 and 104,897 in 2009/10. Over the 15 year period, the number of Indian students increased by 174 percent. The more recent trend is stability.

Overall Rank

2

Despite flat growth, the large, reliable number of students helps to make India an attractive market for U.S. institutions. In 2013/2014, Indian students made up 11.6 percent of all international students in the United States, second only to China.[26]

The Indian market ranks high against the criteria in the ITA Methodology. First, the Indian market has been a large, perennial source of students for many years, suggesting a strong commitment to study in the United States. Second, the OECD reports that in 2011, 223,000 Indian students studied abroad, one of the larger totals in the global market. Third, although the number of Indian student enrollments in the United States has levelled off in recent years, the long-term stability in large numbers of Indian students is positive. Finally, in 2011/12, 44.7 percent of the total Indian students studying abroad chose to study in the United States.

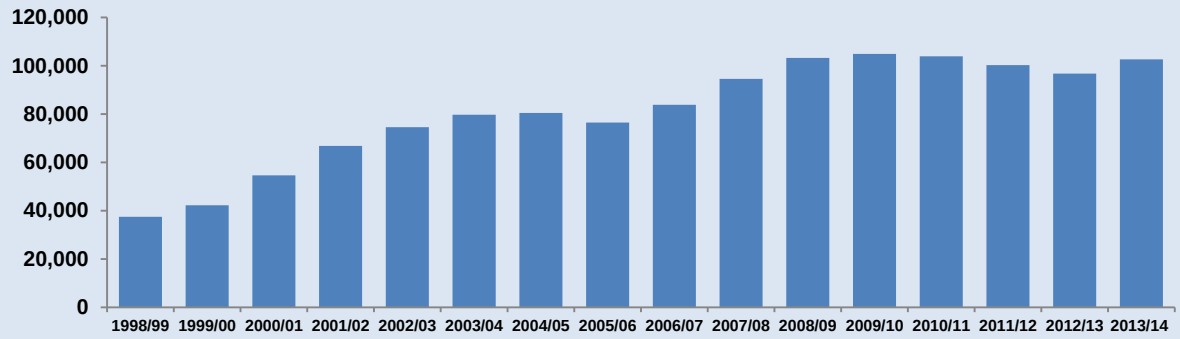
United States is the Destination of Choice for Indian Students

According to the OECD, after the United States with 44.7 percent of students, the second largest destination was the United Kingdom, with 17.4 percent. Canada was the third most popular country, recruiting 6.5 percent of internationally mobile Indian students. The economic impact of all Indian students on the U.S. economy is significant. The U.S. Bureau of Economic Analysis reports that U.S. exports of education services (tuition, fees, and living expenses) to India were $3.3 billion in 2013.[27]

Overview of Global Export Market Opportunities in Education for India

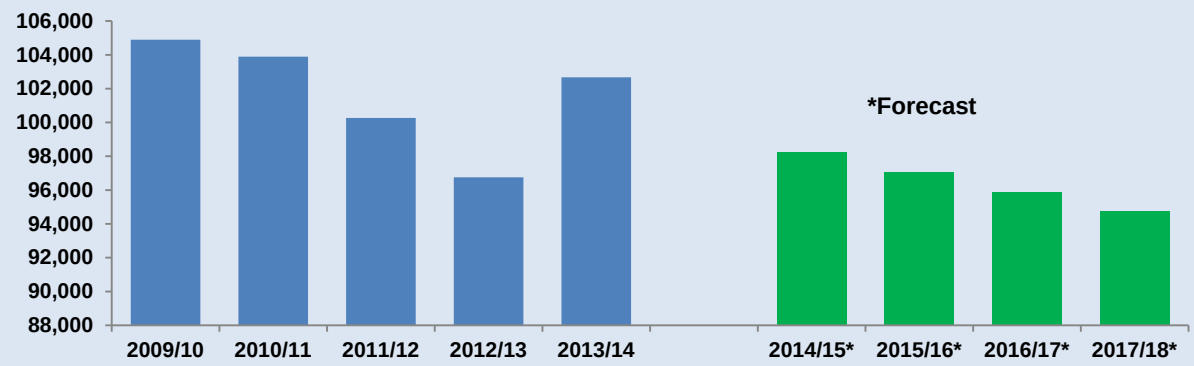
Roughly 60 percent of Indian students in the United States are graduate students, while 12 percent are undergraduates. Students in Optional Practical Training and "Other" disciplines make up the remainder. Most students from India (79 percent) study STEM subjects and the states hosting the largest number of Indian STEM students are California, Texas, and New York.

Figure 1: Indian Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: Indian Students in the United States (2009-2018)



Business/Management is in second place with 12 percent of Indian students.[28]

Future Growth/Opportunities

In the near term, the number of Indian students is likely to remain significant but growth is likely to erode slightly in the near term. The outlook for growth is tempered by the shrinking percentage of Indian students choosing the study in the United States. In 2001, the United States was host to 76 percent of all Indian students studying abroad. This number has fallen to 45 percent in 2012.[29] The United States has lost out to universities in the United Kingdom, Canada, and New Zealand.

Two developments are likely to affect the number of Indian students going abroad for study. First, according to industry experts, the higher education sector in India, which is currently $8.38 billion, is expected to grow at a compound rate of 18 percent through 2020 and reach $42.17 billion. This growth might lead more Indians to pursue their study at home. Second, the rapid growth in enrollment in higher education has led to increasing doubt that India will have enough purely domestic education institutions to meet this high demand.[30]

Other reasons may also help explain Indian students' going to these alternate destinations. Australia is closer to home than the United States, and instruction is in English. The United Kingdom offers education in English and the costs are lower than in the United States.[31]

South Korea

Although the number of South Korean students studying in the United States has trended slightly downward in four of the last five years, South Korean students are still the third largest cohort of foreign students studying in the United States (over 68,000 students or almost eight percent of total foreign enrollments). The U.S. Department of Commerce estimates South Korean students added $2.3 billion to the U.S. economy in 2013 as a result of tuition, fees, and living expenses.

Overall Rank

4

The South Korean market scores well against the criteria in the ITA Methodology primarily because of the size and stability of the numbers of South Korean students who already have chosen the United States. First, the number of South Korean students studying in the United States remains large, although it has plateaued the last few years, reaching 68,047 in 2013/14. Second, the OECD reports that in 2011, 139,000 South Korean students studied abroad and 52 percent of these students chose to study in the United States.

As seen from the chart above, using historical data to project the future, ITA anticipates the market in Korea will decline over the next four years, falling from 68,000 in 2013/14 to 65,000 in 2017/18. Despite this dip, Korea will remain one of the largest "sending" countries in the world.

Although the growth rate trend has slowed, the overall tendency toward a large, stable contribution of students remains. Finally, despite the large share of South Korean students who already come to the United States and recent declines in the U.S. share and growth rates, there is room to expand U.S. enrollments in the future.

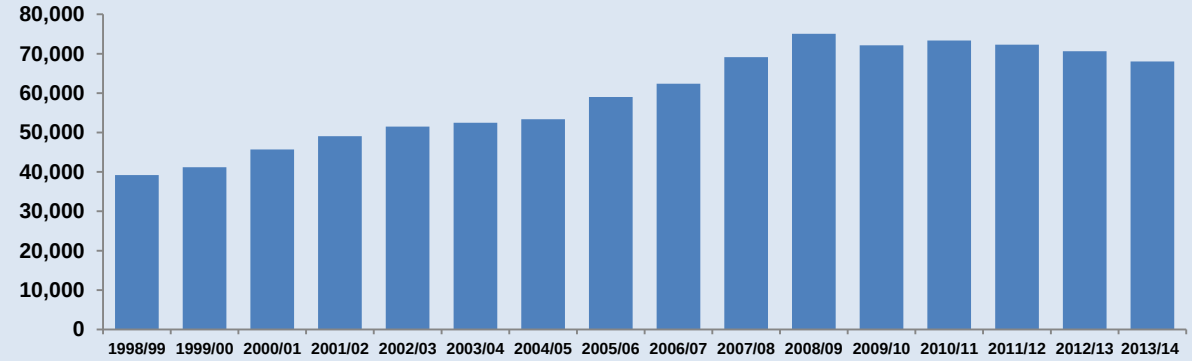
Over the past 10 years, the percentage of South Korean students that chose to study in Canada grew from less than one percent in 2002 to 6.4 percent in 2012. Other significant destinations for South Korean students include Japan (where 18 percent of all South Korean students studying abroad go), Australia (5.6 percent), the United Kingdom (4 percent) and Germany (3.5 percent).

Several of the reasons why Korean students are going to these alternate destinations reflect growing international competition. Australia is closer to home than the United States, and instruction is in English. The costs of study in the United Kingdom and Germany are lower than in the United States. The United Kingdom also offers education in English, as does Germany to an increasing degree.

Level and Fields of Study for South Korean Students

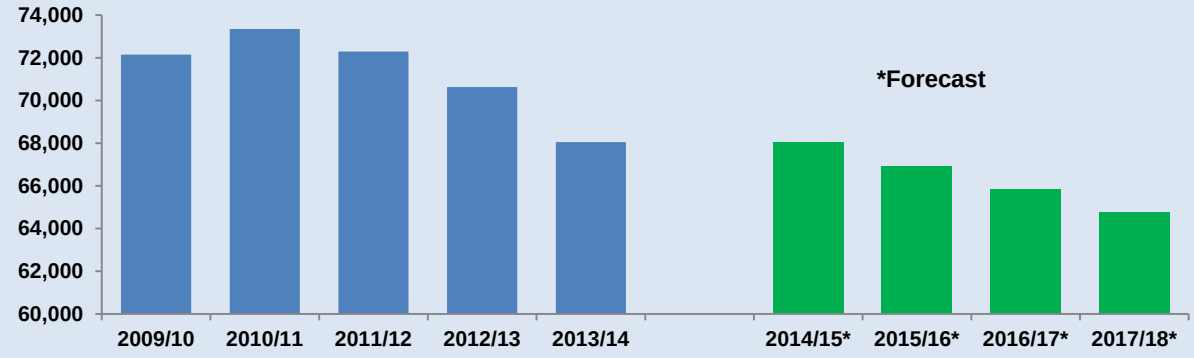
Slightly more than 50 percent of South Korean students are undergraduates; 28 percent are graduate students; eight percent are "Other"; and 10 percent are here for OPT (Optional Practical Training). Some experts have hypothesized that many South Korean

Figure 1: South Korean Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: South Korean Students in the United States (2009-2018)



Source: IIE/Open Doors

graduate students return to South Korea for graduate work due to the sophisticated nature of many graduate programs – especially in the STEM fields.

In terms of Fields of Study, 30 percent of South Korean students in the United States study STEM subjects while 17 percent study Business/Management, 13 percent study Fine and Applied Arts, 12 percent study Social Sciences, 13 percent study "Other," and 4 percent take Intensive English Language training. At 13 percent, South Korea is the country with the largest percentage of students studying Fine and Applied Arts (followed by Taiwan at 12.5 percent and Hong Kong at 10.0 percent). Schools offering a specialty in this subject matter might want to target these markets for potential students.

Future Growth/Opportunities

Although South Korea is currently sending a large number of students to the United States, a declining percentage of South Korean students studying abroad are choosing to study in the United States. In addition, South Korea has one of the lowest birth rates in the world. Combined with the fact that many other countries are increasingly teaching courses in English, these factors combine to make us temper our forecast for any significant increase in the number of South Korean students studying in the United States.

With these limitations in mind, the upside potential is supported by the fact that alumni referrals will continue to power the demand for U.S. education; English skills are expected by most companies in South Korea; South Korean parents are willing to spend a large portion of their income on education, expecting high future returns; and, in many circles, overseas education has become a standard.

Marketing U.S. Colleges and Universities to South Korean Students

South Korean parents are increasingly capable of acquiring information on educational opportunities for their children. Agents are utilized less. U.S. schools should consider employing a combination of on-line advertising, blogging, Facebook, and twitter within their promotional campaigns. Building people to people networks through alumni advocacy as well as developing and broadening exchange programs, which in turn, raise the profile of the U.S. institution, definitely helps U.S. schools attract South Korean students to the United States.

Saudi Arabia

Saudi Arabia is a promising market for U.S. colleges and universities seeking to recruit and attract international students. Over the last decade, Saudi Arabia has become the fourth largest source of international students studying at the post-secondary level in the United States. According to the Saudi government, in the 2012-2013 academic year, there were 107,000 Saudi students studying at the university level in the United States, contributing an estimated $3.2 billion to the American economy.

Overall Rank

3

The significant increase in Saudi students in the United States over the last decade is largely attributable to generous scholarship programs implemented by the Saudi government, especially the King Abdullah Scholarship Program (KASP).[32]

The figures highlighted above are higher than those reported by the Institute of International Education (IIE), cited extensively in this study, but illustrate the same growth trends. Like the Saudi statistics, IIE figures place Saudi Arabia as the fourth largest source of international students studying in the United States with almost 54,000 students enrolled in U.S. colleges and universities last year.[33] The significant difference in these figures reflects a number of factors that shed light on Saudi enrollments in U.S. schools.

First, IIE data are collected through a survey of U.S. colleges and universities. Since more than 25 percent of Saudi students are studying Intensive English Language, these students may be enrolled in programs which are not affiliated with universities. In addition, some Saudi students studying on Saudi government programs may be dual U.S.-Saudi citizens (and therefore not be recorded in IIE data as "foreign" students).

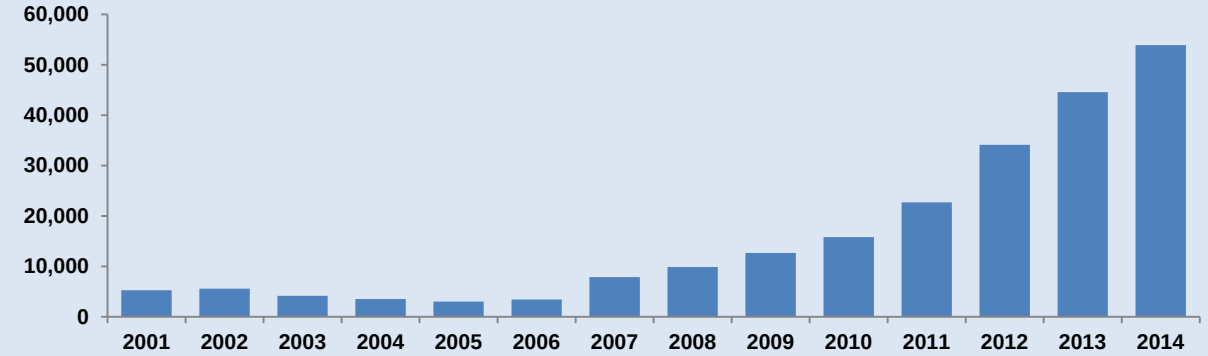
A disproportionately young population coupled with growing university enrollment levels make Saudi Arabia an attractive market for U.S. colleges and universities looking to increase their ratio of international students. Saudi students overwhelmingly choose English-speaking countries when studying abroad, with the United States currently hosting over 60 percent of all Saudi students studying internationally. The United Kingdom, Australia, Canada and New Zealand are also top destinations.[34]

Level and Fields of Study for Saudi Students

Approximately half of Saudi students studying in the United States are in undergraduate studies; 21 percent are graduate students; 28 percent are "Other," such as Intensive English Language training; and just under 2 percent are here for OPT (Optional Practical Training). Intensive English Language programs will be interested to know that Saudi students accounted for over 30 percent of all students studying intensive English in the United States in 2013.[35]

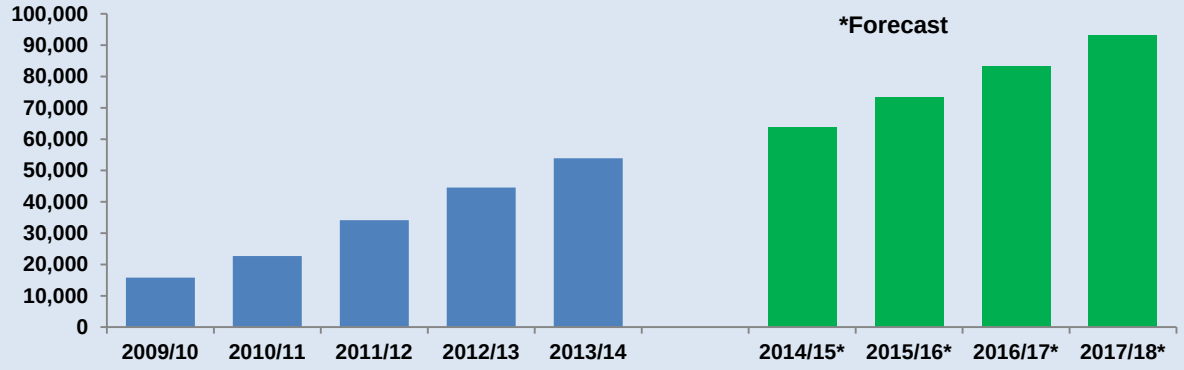
In terms of Fields of Study, slightly over 40 percent of Saudi students in the United States study STEM subjects, while 24 percent study Intensive English and

Figure 1: Saudi Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: Saudi Students in the United States (2009-2018)



Source: IIE/Open Doors

17 percent study Business/Management. Intensive English is often a precursor to studying other subjects and disciplines, and trends suggest that the best model for U.S. colleges to use to attract Saudi students is to offer strong Intensive English classes that then lead to pursuits in STEM and Business/Management programs.[36]

Future Growth/Opportunities

The flow of students from Saudi Arabia studying in the United States may slow down but will likely not reverse despite recent declines in oil revenue and a change in leadership in Saudi Arabia. This forecast is based on the fact that education has become a top priority of the government and public expenditures on education and university scholarship programs like KASP continue to increase. Based on recent trends, ITA projects that students from Saudi Arabia choosing to study in the United States will rise from the IIE figure of 54,000 in 2013/14 to 93,100 in 2017/18, or a 15 percent increase during each of the next four years.

A young and relatively unskilled population clamoring for jobs combined with Saudi Arabia's move to diversify its economy away from petroleum into new fields like life sciences and advanced manufacturing means that education will continue to account for a large share of the government's budget. In addition to promoting study abroad in the United States, leading Saudi academic institutions are looking to develop or expand partnerships and exchange programs with U.S. academic institutions.

Scholarships

The King Abdullah Scholarship Program (KASP) began in 2005, with the aim of sending 15,000 Saudi students to the United States for higher study in the fields of medicine, allied health sciences, pharmacy, engineering, computer science, basic sciences, law, accounting and e-commerce. The state of California currently attracts the highest number of these students, with Texas, Ohio and Florida ranking among the top four.

Other Saudi scholarship programs are offered through entities such as the Saudi Basic Industries Corporation (SABIC), Saudi Aramco, the General Organization for Social Insurance, the Saudi Arabian General Investment Authority (SAGIA), the Institution of Public Administration and Olayan Financing Company.

Barriers to Future Growth

Scholarships like those offered through KASP are only available to students attending academic institutions that are vetted and approved by the Saudi government. American colleges and universities must be on the Saudi Ministry of Higher Education's approved institutions list in order to be eligible to accept scholarship students from Saudi Arabia.[37]

Saudi Arabia is investing considerable resources into its domestic education infrastructure, particularly at the post-secondary level, which may encourage Saudis to study domestically. In fact, the Government has allocated approximately 25 percent of its 2015 budget (about $58 billion) for the education sector. Funded

projects include improvements to several women's universities and the opening of eight new colleges.[38]

Finally, Saudi students may begin to develop an interest in English-language instruction in other countries in the English-speaking world, such as the United Kingdom, Canada, Australia, etc.

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Vietnam

Vietnam has risen from tenth position in 2003/04 with 3,165 students sent to the United States to eighth place in 2013/14 with 16,579 students. Over the ten year period, the number of Vietnamese students increased by 424 percent, the second highest rate of increase after Saudi Arabia. This large, steady growth over a decade helps make Vietnam an attractive market for U.S. institutions. These upward growth trends are likely to continue, offering important export opportunities for U.S. colleges and universities.

Overall Rank

N/A

The Vietnamese market scores well against the criteria in the ITA methodology in Appendix 1. First, the number of Vietnamese students studying in the United States is relatively large and continues to increase each year, reaching 16,579 in 2013/14. Second, the OECD reports that in 2011, 61,000 Vietnamese students studied abroad and that the United States has done well in attracting about 24 percent of the total Vietnamese students abroad. Third, the growth rate of Vietnamese enrollments has increased steadily, especially over the past eight years. Finally, in 2011/12, the relatively low numbers of students going abroad suggests that there is room to grow U.S. export performance in this market.

Based on recent trends, ITA projects the number of Vietnamese students studying in the United States will climb from 16,600 in 2013/14 to 20,100 in 2017/18, or an average of five percent over the next four years.

Level and Fields of Study for Vietnamese Students

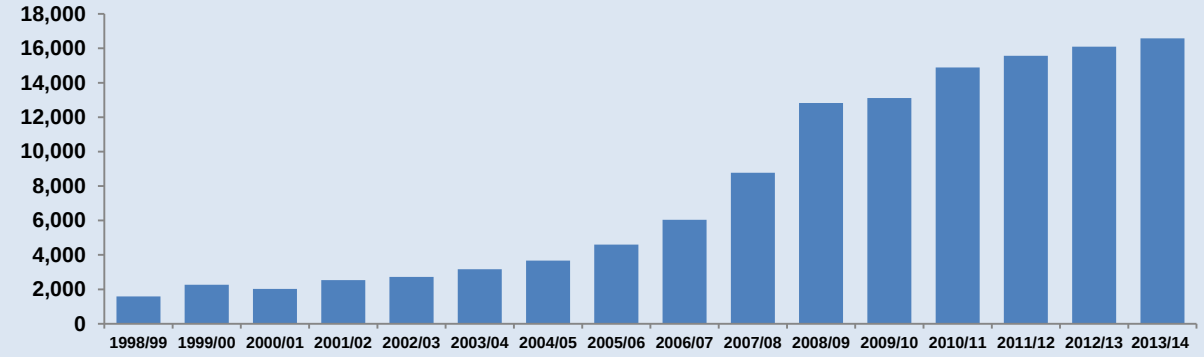
A large majority, 72 percent, of Vietnamese students in the United States are undergraduates. Business and Management attract 38 percent of Vietnamese students in the United States, making it the most popular field of study. The STEM fields are in second place with 30 percent of Vietnamese students. The Social Sciences attract 12 percent of students and Intensive English attracts 11 percent. This strong preference for STEM and business is typical of students from all the leading countries sending students to the United States.

In addition to university study, another potential destination for Vietnamese students is U.S. boarding schools for high school students. The reason is the view, which is becoming more popular, that a year or two studying in a U.S. boarding school will facilitate acceptance at a U.S. college or university.

Future Growth/Opportunities

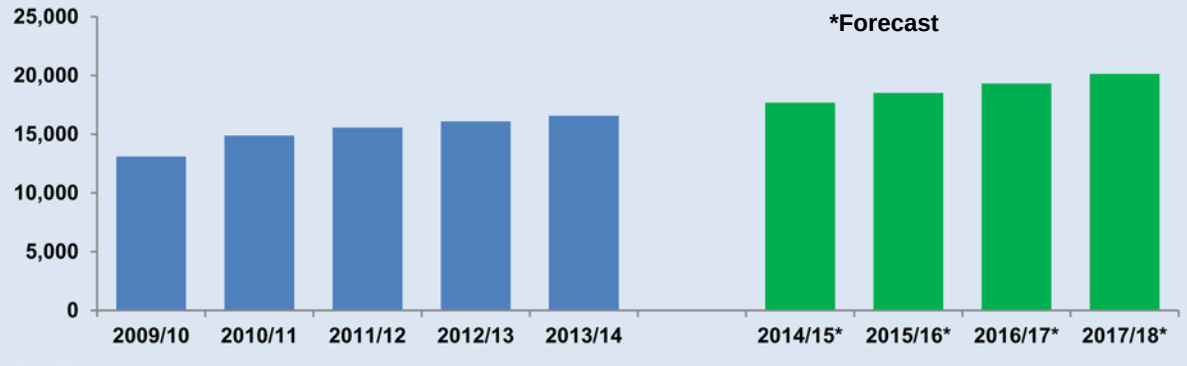
In the near term, the number of Vietnamese students is likely to increase. The number of Vietnamese students increased over the past 10 years by 424 percent, but most of the increase was in the first five years. Between 2008/09 and 2013/14, the number of Vietnamese students grew by slightly less that 30 percent. Two developments might further slow

Figure 1: Vietnamese Students in the United States (1998-2014)



Source: IIE/Open Doors

Figure 2: Vietnamese Students in the United States (2009-2018)



Source: IIE/Open Doors

increases in Vietnamese student enrollment in the United States.

First, improving domestic higher education is a top priority for the Vietnamese Government, with the goal of a 10 percent increase in domestic university enrollment. Second, other destinations such as Australia and Singapore offer proximity, affordable costs, and possible post-graduate employment. Finally, the experience from the MDCP (Market Development Cooperator Program) program, described below, suggests that success in the Vietnamese market requires steady, concerted effort over a long period to learn about the market and how to recruit Vietnamese students.

One sign of confidence in the potential of the Vietnamese education market is the International Trade Administration's granting of a Market Development Cooperator Program (MDCP) award to the Vietnam Education and Training Export Center (VETEC), to promote U.S. colleges and universities to Vietnamese students.

VETEC offers U.S. institutions and Vietnamese students a broad variety of services, including year-round promotion of U.S. education in Vietnam; advertising campaigns and promotions; on-site student advising and counseling; and facilitation of institutional contacts and exchange. Methods similar to those used in this MDCP award will help increase student recruitment in Vietnam over the long term.

Appendix 1: Methodology

After a U.S. college or university considers its program goals and its unique position in terms of international student diversity, the school might find it useful to rely on further analytics of international student trends.

When analyzing which countries or regions the International Trade Administration (ITA) should focus on for case studies, we considered four main factors in assessing which markets were most promising for U.S. colleges and universities attempting to recruit foreign students in the coming years. The factors and their weightings are as follows:

- The number of students from a given country currently studying in the United States (0.40)
- The number of students from a given country studying anywhere outside that country (0.40)
- Historical growth rates and changes in those rates regarding internationally mobile students studying in the United States (0.15)
- Share of each country's students studying in United States, a measure of untapped potential (expressed as a percentage) (0.05)

Figure 1: Near-Term Education Export Market Rankings

Market (Country of Origin)	Students studying in U.S.	Students studying anywhere in world (%)	Growth in students studying in U.S. (2010-13)	Share of each country's students studying in U.S., a measure of untapped potential (%)	Total Score
China	100.0	100.0	54.1	57.7	91.0
India	41.0	29.6	10.6	20.7	30.9
Saudi Arabia	18.9	7.8	100.0	32.6	27.3
South Korea	30.0	18.9	13.2	9.8	22.0
Germany	4.1	16.5	15.6	88.9	15.0
France	3.5	8.2	17.8	83.7	11.5
Luxembourg	0.0	0.7	40.3	100.0	11.3
Russian Federation	2.0	8.1	14.9	89.9	10.8
Norway	0.9	1.9	34.5	83.0	10.4
Spain	2.1	3.5	26.8	78.9	10.2
Brazil	4.6	4.0	25.4	58.2	10.2
Italy	1.8	5.9	16.6	89.4	10.0
Turkey	4.8	7.0	10.0	75.9	10.0
Sweden	1.8	2.1	31.9	73.0	10.0
Indonesia	3.2	5.3	19.2	73.3	10.0
Greece	0.8	4.2	19.6	92.9	9.6
Canada	11.6	6.3	12.9	0.0	9.1
Denmark	0.5	0.5	31.9	76.9	9.1
United Kingdom	4.0	3.3	17.5	60.0	8.5
Slovenia	0.1	0.0	22.8	91.3	8.0
Netherlands	0.8	1.6	17.3	86.1	7.9

We chose "The number of students from a given country currently studying in the United States" because this data allows us to identify markets that already have strong demand for U.S. education. The measure was weighted as 40 percent of the total because we wanted to give significant weight to countries that are currently top markets for education exports. The larger markets (barring unforeseen circumstances) are likely to remain leading contributors for education exports.

"The number of students from a given country studying anywhere outside that country" was selected because it allows us to identify markets that have strong demand for international education in general (not just the United States). We assigned this factor a weighting of 40 percent as we believe countries that are sending large numbers of students abroad are likely to be very good candidates for future recruitment efforts from U.S. institutions.

"Historical growth rates regarding internationally mobile students studying in the United States" was utilized because rates of change in recent growth rates are thought to be indicative of future trends. We assigned this factor a weight of 15 percent as it can be heavily influenced by externalities such as new government programs, currency fluctuations, and new education offerings from other countries.

We chose "Share of each country's students studying in United States, a measure of untapped potential" to examine the opportunity of capturing market share from other countries. We weighted this factor at only five percent of the total because the United States either has a significant market share in most countries, or gaining future market share will be a challenge in some European countries which benefit from very low-cost tuition.

All these variables were normalized so that the best market was given a score of 100 and the worst a score of 0.

With these weightings and the normalized scores, we developed the list of countries rated in Figure 1 above from most likely to experience growth in sending students to the United States, to least likely.

We then reviewed economic and demographic forecasts from the Economist Intelligence Unit and others and reviewed internal U.S. Department of Commerce data to identify other considerations that would influence the projected growth in each of our *Top Markets* countries.

On the basis of this analysis, we have focused the Case Studies on the top six countries. We have added a case study on Brazil (in light of the Brazilian government's Scientific Mobility program to fund 101,000 students studying abroad). We also included a Case Study on Vietnam (given the U.S. Government program supporting VETEC, the Vietnam Education and Training Export Consortium) and interest from the private sector, as demonstrated by the number of requests for information on Vietnam and participation in webinars on Vietnam.

The Case Studies outline historical trends in internationally mobile students from these countries and address additional factors listed above that will influence the projected future numbers of students from these countries studying in the United States.

Forecast:

This report has relied heavily on data from the Institute of International Education (IIE). In order to develop forecasts of internationally mobile students that are likely to study in the United States, ITA reviewed five years of past IIE data and used backward looking linear projections to forecast the next four years. In other words, we are predicting the number of students assuming the rate of growth in the past five years continues over the next four years.
Based on this methodology, ITA projects the number of students studying in the United States will grow by an average of 4.8 percent over the next four years, yielding almost 1,070,000 students by the 2017/18 academic year. In addition, students from China will grow from the current level of 274,000 to almost 421,000 by 2017/18, and increase of 53 percent over the next four years – or an average increase of 11.3 percent per year.

Figure 2: Additional Information

Additional information about these countries and many additional countries can be found in the 2015 Education and Training Services Resource Guide (http://www.export.gov/industry/education/eg_main_082780.asp), a tool developed by the International Trade Administration, part of the U.S. Department of Commerce. This resource guide includes comparable and individual market assessments based on observation and market research.

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SEVIS Data		**Open Doors Data**	
Primary	5,879		
Secondary	55,971		
Associate	80,107	Undergraduate	370,724
BA	367,465	Graduate	329,854
MA	301,237	Other	79,477
Doctorate	138,285	Optional Practical Training	105,997
Language	104,275	**TOTAL**	**886,052**
Other	49,383		
Flight	6,294		
Other Vocational	3,717		
TOTAL	**1,112,613**		

Because SEVIS data includes students studying at technical and vocational institutions, and because the Open Doors data includes more publicly available country-specific detail, this *Top Markets Report* relies on primarily on Open Doors data from the Institute for International Education. More information on SEVIS data is available at http://studyinthestates.dhs.gov/2014/08/sevis-by-the-numbers-latest-trends-on-international-students.
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